### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-025596 Address: 333 Burma Road **Date Inspected:** 28-Jul-2011

City: Oakland, CA 94607

**Project Name:** SAS Superstructure **OSM Arrival Time:** 700 **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes An Qing Xiang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component:** OBG

## **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the Self-Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

SHIP # 19, OBG SEGMENT 14W (NWIT # 09821)

This QA Inspector performed Ultrasonic Testing (UT) of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA inspector generated UT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows.

SEG3020W-093

SEG3020Q-080

SEG3020R-001

SEG3020AZ-418

SEG3020L-085, 087

SEG3020M-088 (One class "A" UT rejectable indication found during inspection)

During the Quality Assurance Ultrasonic Testing (UT) verification of welds located on OBG segment 14W, this Quality Assurance (QA) Inspector discovered the following issues:

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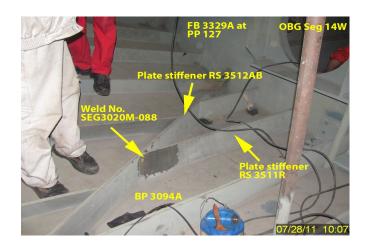
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- -One class "A" longitudinal indication measuring approximately 15mm in length.
- -The depth of the indication is 17mm from face A.
- -The db rating is +2.
- -The material thickness is 20mm.
- -The weld is identified as: SEG3020M-088.
- -The Weld is a Complete Joint Penetration (CJP), Tee-joint, joining the plate stiffener RS3511R to plate stiffener RS3512AB on Bottom Panel (BP) 3094A near Panel point (PP) 127 (E).
- -The "Y" location of the indication is 25mm from free end of weld.
- -The indication is clearly marked on the component.
- -The member is located in ship Zhenhua # 19.

The Notice of Witness Inspection Number (NWIT) is 09821. The indication is located inside the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. As per the contract documents, ZPMC's QC personnel are required to perform 100% UT inspection of these welds.

Incident Report (IR) was generated regarding this issue on this date. See attached photograph for more details.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





# **Summary of Conversations:**

Only general conversation was held between QA and QC concerning this project.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang: 15000422372, who represents the Office of Structural Materials for your project.

**Inspected By:** Gaikwad, Umesh Quality Assurance Inspector

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**Reviewed By:** Peterson,Art QA Reviewer